STEPS IN THE PROCESS:

- Step 1 Determine beginning and end of year booked component costs for each account. Aggregated beginning and end of year component costs for each account reflect data reported on ARMIS 43-02, Table B-1, Columns ab and af, respectively. Pre-USOA data ties to the company's Form M reports. The individual beginning and end of year component costs are derived based on special studies performed by the company, utilizing accounting reporting codes (e.g. EXTCs) and company financial systems.
- Step 2 For each account, determine component distributions (weights) based on the dollars in that account (as derived in Step 1) devoted to each component.
- Step 3 For each account, determine year-over-year growth rate of each component: The contract labor price growth rate is based on Bureau of Labor Statistics Price Indexes (e.g. Employment Cost, CPIW). Labor growth rates reflect the year-over-year change in actual salary, wage and fringe benefit costs. Labor costs are derived from company subsidiary ledgers which support the ARMIS 43-02 report. Growth rates for material costs in each account are based on special studies. One growth rate is calculated for each labor component (contract and company) and used in every account.
- Step 4 Calculate the weighted average growth rate of each subaccount utilizing the component weights (Step 3) and growth rates (Step 3). See mathematical example below that yields a growth rate of 7.78% for account A.
- Step 5 Calculate the weighted average growth rate of each account utilizing the subaccount growth rates (developed in step 4). See the mathematical example above that yields a 4.96% growth rate for account C below.
- Step 6 Determine current year plant index by multiplying the weighted average growth rate of each account (or subaccount) by the prior year plant index.

Suppose, for example, that component costs (based on the most recently updated data) in subaccount A, which is company labor intensive, are \$1,000 for materials, \$8,500 for company labor, and \$500 for contract labor -- for a total of \$10,000 in account A. Then, 10% of the booked costs are for materials, 85% for company labor and 5% contract labor. Suppose further that in year Y materials costs in that subaccount are growing at a rate of 4%, company labor costs at 8.5% and contract labor costs at 3%. Then, the growth rate for that subaccount is (10% * 4%) + (85% * 8.5%) + (5% * 3%) -- for a growth rate in year Y for account A of 7.78%. Also in year Y subaccount B is growing at a rate of 3.55%, and A and B are the subaccounts of account C. If the end of year book costs (as reported in company subsidiary ledgers) for subaccounts A and B are \$11,000 and \$22,000, respectively, then A is 33 1/3% of account C and B is 66 2/3% of account C. The growth rate of account C in year Y is (33 1/3% * 7.78%) + (66 2/3% * 3.55%), or 4.96%.

Calculating the index in year Y for account A uses the index for the prior year and grows it by 7.78%. If, for example, account A's index was 130.0 for the prior year, then the account's index for year Y is 130.0 times 1.0778 or 140.114, which would round to 140.1.

USTA Reply Comments Docket No 94-1 Price Cap Review

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	САР
ALABAMA	Andalusia Anniston Birmingham Duthan Gadsden Leeds Ozark Pell City	Deltacom Interstate Fibernet Metrex, Privacom, Interstate FiberNet Deltacom Interstate Fibernet Interstate Fibernet Deltacom Interstate Fibernet	Birmingham Huntsville Mobile Montgomery	American Comm. Sves. (ACSI) American Comm. Sves. (ACSI) American Comm. Sves. (ACSI) American Comm. Sves. (ACSI)
ARIZONA	Phoenix	Intelcom, City Signal, TCG, Electric Lightwave	Phoenix	MIS
ARKANSAS	Little Rock	Entergy		
CALIFORNIA	Bel Air	MFS	Anaheim	Linkatel
	Beverly Hills	MPS, TCG	Burlingame	MPS
	Burbank	MFS, TCG	Concord	Phoenix Fiberlink
	Century City	MPS, TCG	Cupertino	MF5
	Culver City	TCG, Bay Area Teleport	Cypress	Linkatel
	East Los Angeles	Bay Area Teleport	Foster City	MFS
	El Monte	TCG	Irvine	Linkatel
	El Segundo	MFS, TCG	Kearney Mesa	Linkatel, ICG, Time-Warner
	Fremont	TCG	l.afayette	1CG
	Glendale	TCG, Bay Area Teleport	La Jolla	Linkatel, ICG, Time Warner
	Hollywood	MFS, TCG	Long Beach	Linkatel,MFS
	LA Áirport	MFS, TCG, Bay Area Teleport	Menio Park	MI5
	Lakeword	Linkatel	Millbrae	MES
	Lancaster	Bay Area Teleport	Mission Valley	Linkatel, Time-Warner
	Lodi	Bay Area Teleport	Mountain View	MFS
	Long Beach	Linkatel	Newport Beach	Linkatel
	Los Angeles	MFS, TCG, Bay Area Teleport	Palo Alto	MES, TCG
	Los Gatos	Bay Area Teleport	Pleasanton	ICG
	Milpitas	MPS, 1CG	Rancho Bernardo	Lime Warner
	Morgan Hill	Bay Area Teleport	Rancho Cordova	Electric Lightwave
	Oakland	TCG, Bay Area Teleport	Redword City	MIS
•	Rancho Cordova	Bay Area Teleport	Sacramento	Hectric Lightwave
	Sacramento	Phoenix Fiberlink	San Bruno	MIS
	San Bernadino	Bay Area Teleport	San Carlus	MI5
	San Diego 🕝	Electric Lightwave, Linkatel, Time-Warner	San Mateo	MIS
	San Francisco	MFS, ICG, Bay Area Teleport	Santa Ana	Linkatel
	San Jose	MFS	Santa Monica	ICC.

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	САР
CALIFORNIA (cont)	Santa Barbara	Wiltel	Sorento Mesa	Linkatel 1CC.
	Santa Clara	MFS, TCG	Walnut Creek	ICG.
	Santa Monica	MPS		
	Sherman Oaks	MPS		
	Sunnymead	Bay Area Teleport		
	Sunnyvale	MFS		
	Thousand Oaks	Bay Area Teleport		
	Torrance	Linkatel		
	Van Nuys	Bay Area Teleport		
	West Hollywood	MPS, TCG		
	Westwood	MFS, TCG		
	Woudland Hills	TCG		
COLORADO	Colorado Springs	IntelCom	Boukler	IntelCom
	Denver	TCG, IntelCom, Jones Lightwave, MFS		
	Fort Collins	IntelCom		
	Pueblo	IntelCom		
CONNECTICUT	Hartford	MPS		
	Menden	American Lightwave		
	Meriden	American Lightwave		
DELAWARE	Wilmington	Delaware Lightwave (MFS), Locate	Wilmington	MFS, Eastern Teleflogic
DIST. OF COL.	Washington DC	MPS, Locate		
FLORIDA	Altamonte Springs	Time-Warner	Beandin	El. Digital Media Partners
	Boyton Beach	Locate	Clearwater	MES, Wiltel, Florida Dig. Media Partners, ICI
	Delray Beach	Licate	Ft Lauderdale	MCI Metro/A1S, Amer. Comm. Svcs. (ACSI)
	Fort Lauderdale	TCG	Jacksonville	American Comm. Svcs. (ACSI)
	Jacksonville	Intermedia, AlterNet, Jacksonville Teleport	Lakeland	People's Cable
	Lakeland	Intermedia	Manatee County	Paragon Cable, Lime-Warner
	Melbourne	FiberCap	Miami	MCTMetro/ATS, ACSI, MTS
	Miami	Intermedia, TCG	Orlando	American Comm. Svcs. (ACSI)
	Orlando _	Intermedia	Pensacola	American Comm. Sycs. (ACSI)
	St. Petersburg	Intermedia, Wiltel, Paragon Cable, Jones Lgt.	St. Petersburg	MES, Et Dig. Media Partners, Time Warner
	l allahassee	Intermedia	Sarasota	Intermedia
	Tampa	Intermedia, Jones Lightwave	Fampa Mont Palos Buss b	MIS, Wiltel, 11 Dig. Media Partners, Time Warne
	West Palm Beach	1CG	West Palm Beach	American Comm. Secs. (ACSI)

STATE	CITYAREA	CAP	PLANNED	15
GEORGIA	Atlanta	MFS, Junes Lgt., MCI Metny/ATS, ATI, Interstate FiberNet	Albany	American Commission (ACS)
	Augusta	James Intercable	Atlanta	ACSI, MC I Metro/ A1S, LiberSmith
	Columbus	Interstate FiberNet	Athens	American Comm Svcs. (ACSI)
	LaGrange	Interstate FiberNet	Augusta	American Commisses. (ACSI)
	Newnan	Interstate FiberNet	Macun	American Comm Secs. (ACSI)
	Savannah	PalmettoNet	Savannah	American Comm Sves (ACSI)
HAWAII	Honolulu	Digital Transport Inc. (DTI)	Hawaii	lime-Warner
	Oahu	Digital Transport Inc. (DTI), St. of Hawaii (Oceanic Cable)		
IDAHO				
ILLINOIS	Chicago (Metro) Dekalb	MFS, TCC Time Warner	Metropolis	Kentucky Datal ink
INDIANA	Indianapusis Terre Haute Lafayette	City Signal, Time Warner, Indiana Digital Time-Warner, Indiana Digital Indiana Digital		
IOWA	Cedar Rapids Des Moines Iowa City	MCLEOD Telemanagement IOR Telecom, MWR, MFS MCLEOD Telemanagement		
KANSAS	Kansas City Wichita	MFS, Kansas City Fibernet Muhimedia Hyperiun		
KENTUCKY	Calvert City	Kentucky Data Link	Louisville	IntelCon Cip./Mid-Am.Cable, ACSI
	Castleberry	Kentucky Data Link		Louisville Lightwave, Kentucky Fibritink
	Lengenwo	Kenturky Data Link Owest Free	State of Ny.	C.IW
	Leanging	Intellian Camp/Mid-Am Cable Americal		
	Madismyilk	Kentucky Data Link		
	Partinah	Lixate, Kentik'ky Data Link		
	Princellin	Kentucky Data Link		

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	САР		
LOUISANA	New Orleans	Two-Way Communications, Locate	Baton Rouge Lafayette New Orleans Shreveport	American Comm. Svcs. (ACSI) American Comm. Svcs. (ACSI) Am. Com. Svcs. (ACSI), MC I Metro/ATS, LA Fil American Comm. Svcs. (ACSI)		
MAINE			Southern Area	1CC		
MARYLAND	Baltimure Hagerstown	MFS, Bait: Gas & Elec., Lucate ValleyNet				
MASSACHUSETTS	Andover	TCC	Boston (Metro)	Cablevision, MC1/Metro		
	Boston	MFS, TCG, Locate	Eastern Mass.	ICG, MFS		
	Brockington	TCG				
	Burlington	MFS, TCG				
	Cambridge	MFS, TCG				
	Dedham	TCG				
	Easton	TCG				
	Framingham	T CG				
	Lawrence	TCG				
	Lexington	MPS				
	Lincoln	MPS				
	Makien	TCG				
	Mariburo	TCG				
	Medford	TCG				
	Natick	TCG				
	Needham	TCG				
	Newton	TCG				
	North Reading	TCG				
	Quincy	MFS, TCG				
	Reading	TCG				
	Somerville	MFS, TCG				
	Springfield	Brooks (Fivecom)				
	Waltham	MFS, TCG				
	Wilmington	TCG				
	Woburn	TCG				

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	CAP
MICHIGAN	AnnArbor Detroit Grand Rapids Lansing	City Signal TCG, City Signal City Signal City Signal	Detroit Saginaw Muskegon	Mt5 1CC City Signal
MINNESOTA	Minneapolis-St. Paul	MFS, FiberCom, Continental Cable	-	•
MISSISSIPPI	Jackson	Access Transmission Svcs.	Biloxi Jackson	American Comm. Svcs. (ACSI American Comm. Svcs. (ACSI
MISSOURI	Kansas City Springfield St. Louis	MFS, Kansas City Fibernet Springfield FiberNet MFS, TCG, FiberNet, MCI Metro, F.A.S.T.	St. Louis State of Mo.	FiberNet 1C1
MONTANA				
NEBRASKA	Kearney Omaha	Cable One TCG, MFS		
NEVADA	Las Vegas	City Signal		
NEW HAMPSHIRE	Portsmouth	TCG	Nashua Portsmouth Southern Area	MFS TCC MES
NEW JERSEY	Camden Northern N.J.	Eastern TeleLogic MFS, TCG, MH Lightnet, Locate	Southern N.J.	ICG
NEW MEXICO	Hubbs	Eastern New Mexico Co-op	Albuquerque State of N.M.	IntelCom Jones Lightwave

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	CAP MC 1/Metro		
NEW YORK	Albany Buffalo Long Island Mamaroneck New York (Metro) Rochester Syracuse Westchester White Plains Yonkers	MFS, Hyperion MFS, Hyperion, Locate TCG, Cablevision, Locate, MFS TCG MFS, TCG, Locate, Cablevision ACC Corp. Hyperion TCG MFS, TCG, NNI MFS	New York (Metro)			
NORTH CAROLINA	Cary Charlotte Durham Raleigh	FiberSouth IOG-Access Svcs., Lucate, Charlotte AXS FiberNet FiberSouth	Asheville Charlotte Currituck County Durham Greensboro Raleigh Research Tri. Park State of N.C. Winston-Salem	American Comm. Svcs. (ACSI) ACSI, Time-Warner Cox FiberNet FiberNet, Am. Lightwave, FiberSouth, Lime-Warn American Comm. Svcs. (ACSI), ICG Time-Warner, FiberNet FiberNet, Am. Lightwave, FiberSouth Jones Lightwave American Comm. Svcs. (ACSI)		
NORTH DAKOTA						
ОНЮ	Cincinnati Cleveland	FiberNet, IntelCom, City Signal, Time-Warner, WU-ATS, Ohio Links Intekom Group	Akron Butler Clark	InteK om InteK om InteK om		
	Columbus	City Signal, Time Warner	Cleveland	ICC		
	Dayton	Intekom Group	Cleveland-Cuyahoga	MF5, City Signal, IntelCom, Time-Warner, TCG		
	Lima	Time-Warner	Cincinnati	IntelCom, Ohio Links, City Signal,		
	Mansfield	Adelphia	41 4 4 4	Time Warner, WU-A1S		
	Marysville	Time-Warner	Columbus-Franklin	MFS, City Signal, Libertel, Lime-Warner, W.U.		
	Mason/Lebanon	Coaxial Cable	Crawford	Cablevision Libertel, Lime-Warner		
	Warren	TCI	Delaware Erie	Tibertet, Time warner Cablevision		
				Capevision Cablevision		
			Geauga Greene			
			C reene Hamilton	City Signal		
		,, ,, ,, ,, ,, ,, ,, ,, ,,, ,,,,,,		City Signal, LiberNet, IntelCom, Western Union		

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	CAP
			Huran	Cables isom
			Lake	Cablevision
			Lorain	Cablevision
			Lucas	City Signal, IntelCom
			Mahoning	City Signal, IntelCom
			Medina	Cablevision, IntelCom
			Montgomery	City Signal, IntelCom
			Montrose	IntelCom
			Morrow	Cablevision
			Oxford	Locate
			Portage	IntelCom, Cablevision
			Richland	Cablevision
			Summit	IntelCom, Time-Warner, Cablevisio
			Tipp City	Time-Warner, IntelCom
			Toledo	InteK:om
			Troy	Time-Warner, IntelCom
			Trumbell	City Signal, IntelCom
			Union	Fibertel
			Wayne	Cablevision
			Wood	City Signal, IntelCom
OKLAHOMA	Broken Arrow Oklahoma City Tuba	PSO Metrolink Cox Cable, Dubuon Fiber PSO Metrolink		
ORECON	Beaverton Portland	ELectric Lightwave, PacNet, FiberNet ELectric Lightwave, PacNet	Beaverton	MFS
PENNSYLVANIA	Allegheny County	TCG, MPS, Penn Access	Erie	Penn Access
	Beaver County	TCG		
	Carlisle	Valletnet		
	Chambersburg	Valletnet		
	Pittsburgh	MFS,TC1/Penn Access, Locate		
	Philadelphia	MFS, Eastern TeleLogic, Locate		

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	САР		
RHODE ISLAND	State of R. I.	Licate	Providence	MES, TCG, Jones, Brooks		
OUTH CAROLINA	Cayee	МГХ	Charleston	American Comm. Svcs. (ACSI), ICG		
	Charleston	PalmettoNet	Columbia	American Comm. Svcs. (ACSI), R. C.		
	Columbia	MPX, PalmettoNet	Greenville	American Comm. Svcs. (ACSI), ICG		
	Florence	PalmettoNet	Spartanburg	K.G.		
	Myrtle Beach	PalmettoNet				
	St. George	PalmettoNet				
	Sumter	PalmettoNet PalmettoNet				
	Waterboro	PalmettoNet				
	Yemassee	PalmettoNet				
SOUTH DAKOTA						
TENNESSEE	Memphis	City Signal	Chattanooga	American Comm. Svcs. (ACSI)		
	Nashville	City Signal, IOG-Access Svcs.	Knoxville Memphis Nashville	American Comm. Svcs. (ACSI) Time-Warner, Access Transmission Svcs Hyperion, ACSI, Access Transmission Svc		
TEN 40		. Adam				
TEXAS	Addison	MPS Time-Warner	Denton	MFS, 1CG		
	Austin Carrolton	MPS, TCG	Houston Louisville	Lime-Warner MFS		
	Dallas	MFS,TCG, MCI Metro, FiberSouth, Phonoscope Com.	Comsense	1911 .5		
	Farmers Branch	MPS				
	Houston	MFS,Phonoscope,TCG, MCI Metro, FiberSouth				
	Irving	TCG, MPS				
	Plano	MFS, TCG				
	Richardson	MPS				
	San Antonio	FiberSouth				
UTAH	Salt Lake City	Questar Telecom, IntelCom	Salt Lake City	Hectric Lightwave		

STATE	EXISTING CITY/AREA	CAP	PLANNED CITY/AREA	САР
VIRGINIA	Blacksburg	Valley Net	Chesterfield	Virginia Metrote
	Bluefield	Valley Net Valley Net	Hampton Rds	Cox LiberNet
	Charlottesville	ValleyNet	State of Va.	Jones Lightwave
	Covington	ValleyNet		•••
	Edinburg	ValleyNet		
	Harrisonburg	Valley Net		
	Lexington	ValleyNet		
	Norfelk	Cox Fibernet		
	Radford	Valley Net		
	Richmond	AlterNet of Virginia, Hyperion, Virginia Metrotel		
	Roanoke	ValleyNet		
	Staunton	Valley Net		
	Stephens City	Valley Net		
	Troutville	Valley Net		
	Virginia Beach	Cox FiberNet		
	Waynesboro	ValleyNet		
	Wytheville	Valley Net		
WASHINGTON	Issaqua	TCG	Everett	ICG
	Kennewick	Northwest Microwave	Kirkland	ICG
	Seattle	FiberNet, Electric Lightwave, TCG, Digital Direct		
		Northwest Microwave, PacNet, MFS		
	Spokane	Electric Lightwave		
	Wenatchee	Northwest Microwave		
WEST VIRGINIA	Martinsburg	ValleyNet		
WISCONSIN	Milwaukee	†CG		· - · · · · · · · · · · · · · · · · · ·
WYOMING				

Source: Bellcore, 1994

Bringing People Together



Changes in our competitive landscape

Multimedia networks will lead to new ways of communicating and computing and new forms of education and entertainment.

Telephone and cable television firms are torming alliances to speed their delivery of multimedia services to the home. A notable example is the proposed merger of Bell Atlantic Corp. and Tele-Communications Inc. Focusing on the programming to be provided by these networks. QVC Network Inc. and Viacom Inc. were competing to acquire Paramount Communications Inc., the entertainment company, at year-end.

Several firms are announcing major new networks. Pacific Bell's planned \$16 billion network is a good example. AT&T, as a supplier of network systems and services and a provider of multimedia products and services, will be a supplier as well as a customer and competitor of these firms.

The new alliances and networks, increas-

ing competition, and changes in technology and regulation are all leading to more choices for customers. These trends should also lower our costs to reach customers over local networks. Success in this new multimedia environment will depend on innovation and giving customers value for their purchases.

Competition is global and increasingly between multinational firms with partners from different nations.

To offer one-stop shopping for telecommunications services to companies that dobusiness globally, we formed WorldPartners with Kokusai Denshin Denwa Co. Ltd. of Japan and Singapore Telephone. We intend to also find European partners or build networks there ourselves, spending as much as \$350 million. British Telecom Plc and MCI Communications Corp. (MCI) also formed an alliance, as did Germany's Deutsche Bundespost Telekom and France Telecom.

British Telecom applied to the FCC to

provide long distance service in the U.S. We applied to provide service in the U.K. and also asked the FCC to prevent non-U.S. carriers from operating in the U.S. unless we can compete in their home markets.

We extended our rivalry with MCI to Canada through an alliance with Unitel Communications, Inc. MCI is allied with the Stentor consortium there. Mexico will open long distance services to competition from U.S. carriers in 1996 as part of the North American Free Trade Agreement (NAFTA). NAFTA should also aid our sales of network systems to Mexico.

In 1993 we signed an important agreement with the People's Republic of China, where we will compete with Canada's Northern Telecom Ltd., France's Alcatel Alsthom S.A., Sweden's Telefon AB L.M. Ericsson and possibly others. This past year we also won our first contract to supply switching equipment to Japan, a market that is dominated by Fujitsu Ltd. and NEC Corp.

1111111111111

Cost controls, coupled with our revenue growth, caused our gross margin percentage to improve the past two years. Operating expenses grew 7.5% in 1993, mainly because of marketing and sales efforts for telecommunications services and provisions for business restructuring. Such marketing and sales expenses also rose in 1992, but total operating expenses declined because of restructuring and other charges in 1991.

To increase our presence outside the U.S., we are hiring employees, building plants and forming joint ventures. However, during the past two years the economies of Europe and Japan were very weak and we needed to restructure some of our overseas operations. For these reasons we reported an operating loss in our operations outside the U.S. both years. Nevertheless, we continue to believe that these operations and markets provide excellent opportunities for future growth in revenues and earnings.

All our business units face stiff competition. Prices and technology are under continual pressure. Such market conditions, along with a slow-growing economy, make the ongoing need for active cost controls even more urgent. Managers must continuously assess their resource needs and consider further steps to reduce costs. Sometimes these steps will include consolidating facilities, disposing of assets, reducing work force or withdrawing from markets.

Like other manufacturers, we use, dispose of and clean up substances that are regulated under environmental protection laws. We also have been named a potentially responsible party (PRP) at a number of Superfund sites. At most of these sites, our share is very limited and there are other PRPs who can be expected to contribute to the cleanup costs. We review potential cleanup costs and costs of compliance with environmental laws and regulations regularly. Using engineering estimates of total cleanup costs, we estimate our potential liability for all currently and previously owned properties where some cleanup may be required, includ-

ing each Superfund site where we are named a PRP. We provide reserves for these potential costs and regularly review the adequacy of our reserves. In addition, we forecast our expenses and capital expenditures for existing and planned compliance programs as part of our regular corporate planning process. Despite these procedures, it is very difficult to estimate the future impact of actions regarding environmental matters, including potential liabilities to us. However, we believe that cleanup costs and costs related to environmental proceedings and ongoing compliance with present laws will not have a material effect on our future expenditures, earnings or competitive position beyond that provided for at year-end.

Many of our employees are represented by unions. In 1992 AT&T management and union bargainers negotiated innovative labor agreements with provisions for employees' career security and well-being as well as higher wages and increased employee ownership of the business. Under the wage portion of the agreements, employees at the top of each wage schedule received increases of 4% in 1992 and 3.9% in 1993, and will receive an increase of 3.9% in 1994. Pensions are increased by 13% for those who retire after May 31, 1992. The agreements also retained management flexibility to react to business conditions while enhancing education, training and job-changing opportunities for employees.

Telecommunications Services

These revenues grew 0.7% in 1993 and 2.0% in 1992, driven by volume growth. Billed minutes for switched services rose 5.5% in 1993 and 6% in 1992, paced by business services. Volume growth exceeds revenue growth as customers select more of the higher-value, lower-priced services made possible by our greater efficiency. This shift in the mix of services that customers select lowers average per-minute revenues. In the latter

half of 1993 we raised some of our prices and fees—about \$500 million on an annual basis. These increases were primarily for services where customer demand is not very sensitive to price. In late December we filed for 1994 price increases of \$750 million on an annual basis and also announced a new discount plan for high-volume callers. We expect the effects on revenues of this discount plan and those 1994 price increases to offset each other. In January 1994 we also proposed to raise prices for some business services by \$165 million on an annual basis.

We expect improving economic conditions and higher prices to cause our telecommunications services to grow faster in 1994 than in 1993.

Telecommunications Services

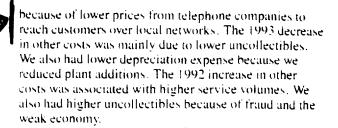
1993	1992	1991		
\$39.863	\$39.580	\$38.805		
17,709	18.132	18.395		
7,009	7.135	6.881		
24.718	25.267	25.276		
\$15.145	\$14.313	\$13.529		
38.0%	36.2℃	34.9%		
	\$39.863 17.709 7.009 24.718 \$15.145	\$39,863 \$39,580 17,709 18,132 7,009 7,135 24,718 25,267 \$15,145 \$14,313		

This past year we announced AT&T TrueVoice® service, a new, patented technology to improve the sound quality on calls placed within the continental U.S. and Canada. We expect to complete the national rollout by April 1994 so that AT&T TrueVoice service will operate automatically on every call placed on our network. We believe it gives us a competitive advantage that will help us attract and keep customers.

Markets for telecommunications services are extremely competitive. AT&T is the market leader, but we saw another small decline in our market share this past year. Our own data and the data of the Federal Communications Commission (FCC) show that our market share is about 60% of the minutes billed for inter-LATA switched services. We withstood an important challenge to our market position when the FCC allowed customers of inbound "800" services to switch carriers without penalties for a 90-day period in 1993. We retained 95% of our 531 largest customers and won contracts away from our competitors. Many of these customers signed long-term contracts, so we emerged from this "Fresh Look" period with signed contracts having a greater dollar value than those we had before.

The FCC and state utility commissions regulate our services, and many more rules are imposed on us than on our competitors. Because of fierce competition and rapid changes in technology and customer needs, the FCC adopted "price caps" in 1989, increasing our flexibility to respond to those market conditions. Since then, the FCC has removed all limits on our prices for many business services. However, the FCC decided in June 1993 to continue price caps for residential services instead of reducing regulation of AT&T.

Total costs of telecommunications services declined this past year; costs in 1992 were about level with those in 1991. Despite higher calling volumes, access and other interconnection costs dropped both years largely



Products and Systems

Despite a weak global economy and intense price competition, our sales grew 8.0% in 1993 and 3.3% in 1992. Sales outside the U.S. grew at a faster rate than U.S. sales and contributed more than half the increase in both years. Based on our current expectations for the global economy, we expect greater sales growth in 1994.

Products and Systems

Dollars in millions	1993	1992	[99]
Revenues Telecommunications			
network products and systems	\$ 8,345	\$ 7,691	\$ 7,490
Computer products and	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3 , , , , , ,
systems	3.597	3,433	3,667
Communications prod- ucts and systems	3.438	3.098	2.852
Microelectronics prod- ucts, special-design products for U.S. government, and			
other*	2,418	2.251	1,932
Products and systems	17.798	16.473	15,941
Total costs	10,809	9,846	9,134
Gross margin	\$ 6,989	\$ 6.627	5 6,807
Gross margin percentage	39.3%	40.2%	42.7%

"Other" is composed principally of media, predominantly for use with automated teller machines and point-of-sale equipment, and business forms.

Revenues from sales of telecommunications network products and systems grew 8.5% in 1993 and 2.7% in 1992. The 1993 increase came chiefly from higher sales of wireless products, switching equipment and operations systems. In 1992 the growth came mainly from higher sales of cable systems and switching equipment. Sales outside the U.S. rose both years while U.S. sales grew in 1993. Orders were heavily weighted toward the 1991 start of a seven-year. \$600 million contract to supply GTE Corporation with wireless equipment, so U.S. sales were lower in 1992.

Many countries are modernizing their communications networks. This will lead to many sales opportunities in the years ahead. We expect to partner with these countries because we provide a full range of integrated products and services and, sometimes, assistance in financing their equipment purchases.

In February 1993 we signed an agreement with the State Planning Commission of the People's Republic of China. Under that proposed partnership, we expect to engage in local research, development and manufacturing of central office switching equipment, cellular communications systems and telecommunications networks for use in that country.

An Everylew of Our Business Operations

Our main business is meeting the communications and computing needs of our customers by using networks to move and manage information. We divide the revenues and costs of this business into three categories on our income statement: telecommunications services, products and systems, and rentals and other services. AT&T Capital Corporation (AT&T Capital) and AT&T Universal Card Services Corp. (Universal Card) are partners with our communications and computing business units as well as innovators in the financial services industry. We include their revenues and costs in a separate category on our income statement: financial services and leasing.

Competition in communications and computing is global and increasingly involves multinational firms and partners from different nations. To increase our global presence, we are hiring, building facilities and investing outside the U.S. We believe these commitments of resources are necessary to be successful in these markets. However, the economies of Europe and Japan were very weak in 1992 and 1993, and we restructured some operations in those areas. For these reasons we reported operating losses, in total, for the past three years in our units outside the U.S. Nevertheless, we continue to believe that these operations and markets provide excellent opportunities for future growth in revenues and earnings.

All our business units face stiff competition. Prices and technology are under continual pressure. Such market conditions make the ongoing need for cost controls even more urgent. Managers must continuously assess their resource needs and consider further steps to reduce costs, which could include consolidating facilities, disposing of assets, reducing workforce or withdrawing from markets.

In 1993 one of our business units, AT&T Global Information Solutions Company, offered an early retirement program and a voluntary separation program to its U.S.-based employees. About 2,200 employees accepted the early retirement offer, and the total workforce at the unit has declined by more than 10% since year-end 1993. We also provided reserves in 1993 to restructure and centralize support services for telecommunications services and for other restructuring activities. In total we provided \$498 million before taxes in 1993 for restructuring activities.

At year-end 1994 reserves for all restructuring activities amounted to about \$900 million, most of which relates to not lease payments to be made over the life of the related leases. We believe the balance of reserves is adequate for the completion of planned activities to improve efficiency

as part of our commitment to meet intense competition.

Like other manufacturers, we use, dispose of and clean up substances that are regulated under environmental protection laws. We also have been named a potentially responsible party (PRP) at a number of Superfund sites. At most of these sites, our share is very limited and there are other PRPs who can be expected to contribute to the cleanup costs. We review potential cleanup costs and costs of compliance with environmental laws and regulations regularly. Using engineering estimates of total cleanup costs, we estimate our potential liability for all currently and previously owned properties where some cleanup may be required, including each Superfund site where we are named a PRP. We provide reserves for these potential costs and regularly review the adequacy of our reserves. In addition, we forecast our expenses and capital expenditures for existing and planned compliance programs as part of our regular corporate planning process. Despite these procedures, it is very difficult to estimate the future impact of actions regarding environmental matters, including potential liabilities. However, we believe that cleanup costs and costs related to environmental proceedings and ongoing compliance with present laws will not have a material effect on our future expenditures, annual consolidated financial statements or competitive position beyond that provided for at year-end.

Many of our employees are represented by unions. In 1995 we will negotiate new labor agreements because the 1992 contracts are due to expire on May 27.

Telecommunications Services

These revenues, which include wireless services revenues, grew 4.3% in 1994 and 1.6% in 1993. Volume growth, caused by market share gains among residential customers, strong demand from business customers, new cellular customers and the improved economy, fueled the faster growth in 1994.

Wireless services revenues, including cellular, messaging and air-to-ground services revenues, grew to \$2,280 million in 1994 from \$1,760 million in 1993 and \$1,387 million in 1992, primarily because of the added traffic coming from new customers. Cellular customers served by companies in which AT&T has or shares a controlling interest increased to 4.0 million at year-end 1994, from 3.0 million at the end of 1993 and 2.2 million at the end of 1992.

Billed minutes for switched long distance services rose more than 7.5% in 1994 compared with 5.5% in 1993. Volume growth exceeds revenue growth because many customers are selecting higher-value, lower-priced

Reputation in the Margo:

To complete the merger, McCaw's owners exchanged their McCaw stock for 197.5 million shares of newly issued AT&T stock. At the market closing price for AT&T stock on September 19, the official day of the inerger,

that exchange was worth about \$11.5 billion.

We accounted for the merger as a pooling of interests. That means we combined the financial statements for the two companies. We did, however, take out the business

between the companies just as we remove dealings between other AT&T units. Now all our financial information shows combined amounts as if we had always been one company.



J. 5.1773 12.25

Eleven Year Summary of Selected Financial Data

(unaudited) AT&T Corp. and Subsidiaries

Dollars in millions (except per share amounts)

FROM

	1994	1993*	1992	[991	1990	1989	1988*	1987	1986	1985	1984
Results of Operations	-	**********	-								
Total revenues	\$75,094	\$6 9,351	\$66,647	\$64,455	\$63,228	\$61,604	\$62,067	\$60,726	\$61,975	\$63,159	\$60,326
Research and											
development expenses	3,110	3,111	2,924	3,114	2,935	3,09 8	2,988	2,810	2.599	2,527	2,477
Operating income (loss)	8,030	6,568	6,628	1,570	5,622	4,931	(2,381)	4,164	978	3,562	2,825
Income (loss) before extraordinar	у										
of accounting changes	4,710	3,702	3,442	171	3,475	2.820	(1.527)	2.374	609	1,856	1,712
Net income (loss)	4,710	(5,906)	3,442	171	3,666	2,820	(1,527)	2,374	434	1,856	1,712
Earnings (lose) per common share before extraordinary item and cumulative effects		• • •	·								
of accounting changes	3.01	2,39	2.27	0.12	2.38	1.95	(1.06)	1.61	0.36	1.21	1.14
Earnings (loss) per	J. U I	,,,	2.6 7	V.14	4.50	1,73	(1.00)	1.01	VID V		*1.4
common share	3.61	(3.82)	2.27	0.12	2.51	1.95	(1.06)	1.61	0.24	1.21	1.14
Dividenda declared per	3.41	(2.02)	212 (V	2.21	•.,,_	(1.00)	1.01	0.24		
common spare	1.32	1.32	1.32	1.32	1,32	1.20	1.20	1.20	1.20	1.20	1.20
	127		1.56		1,3		1.20		1.20		
Assets and Capital											
Property, plant and											
equipment—net	\$22,035	,	\$20,798	\$19,887		\$17,653	\$16,886	\$22,159	\$22,247	\$23,182	\$22,180
Total assets	79,262	69,393	66,104	62,071	57,036	45,228	41,945	45,583	44,305	44,824	43,461
Long-term debt including capital lessos	11,358	i 1,802	14,166	13,682	14,579	10,116	10,172	9,060	8,234	8,104	8,963
Common shareowners'											
equity	17,921	13,374	20,313	17,973	17,928	15,727	13,694	16,913	15,849	16,945	15,852
Net capital expanditures	4,853	4,296	4,328	4,376	4,369	4,162	4,528	3,936	3,977	4,303	3,685
Other information											4
Operating income (loss) as a percentage of											
revenues	10.7%	9.5%	10.0%	2.4%	8.9%	8.0%	(3.8)%	6.9%	1.6%	5.6%	4.7%
Net income (loss) as a											
percentage of revenues	6.3%	(8.5)%	5.2%	0.3%	5.8%	4.6%	(2.5)%	3.9%	0.7%	2.9%	2.89%
Return on average common equity	29.5%	(47.1)%	17.6%	0.9%	21.2%	19.1%	(8.9)%	14.3%	2.0%	10.6%	10.4%
Data at year-end:	47.J /4	(41.17/10	17.07	0.574	21.276	17.170	(0.7)76	14,378	2.076	10.070	10.470
Stock price per share	\$50.25	\$52.50	\$51.00	\$39,125	\$30,125	\$45.50	\$28.75	\$27.00	\$25.00	\$25.00	\$19.50
Book value per common	436.52	\$ 32.30	331.00	#37.16J	330.123	373.30	340.73	327.00	J 22.00	323.00	317.70
share	311.42	\$ 8.65	\$13.31	\$12.05	\$12.33	\$10.92	\$ 9.57	\$11.87	\$11.04	\$11.73	\$11.19
Debt ratio	58.3%	64.4%	53.1%	54.8%	53.5%	45.0%	45.8%	38.4%	39.6%	39.9%	42.0%
Debt ratio excluding	20 ~3 76	04.476	33.176	34.676	33.376	43.0%	47.0%	JQ. 47 6	37.070	37.776	44.07%
financial services	34.1%	49.1%	40.8%	46.0%	47.6%	39.3%	42.2%	35,2%	37.6%	38.4%	41.7%
									•		
Exaployees	304,500	317,700	213'AY	322,300	333, 4 00	J43,000	307,400	300,200	J/9,900	400,400	427,800

^{*1993} data reflect a 59.6 billion not charge for three accounting charges.

1991 data reflect \$4.5 billion of business restructuring and other charges.

¹⁹⁸⁸ data reflect a \$6.7 billion charge due to accelerated digitization of the long distance network.

¹⁹⁸⁶ data reflect \$3.2 billion of changes for business restructuring, an accounting change and other items.

services made possible by our increasing efficiency. Although we raised prices on basic services over the past two years, the shift in the mix of services that customers selected reduced average per-minute revenues in 1994 and 1993.

AT&T True USA Savings and AT&T True Rewards offer savings and other benefits to residential customers based on their calling volumes. We also rolled out AT&T TrueVoice service, a patented technology to improve the sound quality on calls placed within the continental U.S. and Canada. Other offers and calling plans now share this theme of offering customers true value. These efforts helped us retain and win back residential customers in 1994, allowing us to recapture some market share for the first time since the breakup of the Bell System in 1984.

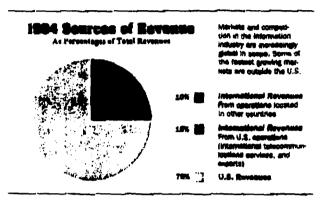
We expect continuing strong volume growth in 1995, leading to further growth in telecommunications services revenues. Several of our initiatives will enhance future network capabilities for communications and computing. For example, since late 1994, Network Notes has enabled customers to access applications and information hosted on the AT&T network that are compatible with the popular Notes groupware software from Lotus Development Corp. Beginning in 1995, Netware Connect services, based on popular networking software from Novell, Inc., will enable users to link computers or use computer-based services through the AT&T network. Through our relationship with Xerox Corp., users will be able to store and transmit highquality production documents through our network. Our WorldWorx service, developed in cooperation with several major equipment vendors, will permit interactive, multipoint video and data calls. Customers using our PersonaLink service may program "intelligent agents" to sort through, retrieve and monitor desired information on networks.

Total cost of telecommunications services declined both years despite higher volumes, in part because of reduced prices for connecting customers through local networks. In addition, we improved our efficiency in network operations,

engineering and operator services. With lower costs and higher revenues, the gross margin percentage rose to 41.8% in 1994 from 39.0% in 1993 and 37.2% in 1992.

Products and Systems

Expansion abroad and into new customer segments, improved global economic conditions and major contract wins raised sales by 18.1% in 1994 and 8.1% in 1993 despite stiff price competition. Sales outside the U.S. grew at a faster rate than U.S. sales and were responsible for more than half the growth both years. We expect sales under major contracts and the continuing economic recovery outside the U.S. in 1995 to pave the way for further growth in revenues.



Revenues from sales of telecommunications network products and systems grew 17.3% in 1994 and 8.5% in 1993. The 1994 increase reflected higher sales across this product line, particularly in switching and transmission systems and wireless products. About \$243 million of switching revenues in 1994 came from consolidating A.G. Communication Systems Corporation because AT&T raised its ownership to 80%. The 1993 increase came chiefly from higher sales of wireless products, switching equipment and operations systems. For the last two years, sales grew both inside and outside the U.S.

Sputhytt op Some Trends m **Telecomm**unications Services

Competition is changing.

his we look ahead, along with growing opportunities, we see more direct competition for AT&T coming from local telephone, long distance, cable television, wireless and other companies that offer network services. AT&T, as a supplier of networking systems, services and products, will be a supplier as well as a customer and competitor of these firms. There may also be other entrants from the communications and information services industries, such as providers of information systems, who will offer basic or integrated services.

Customers and competitors - present and future - are making acquisitions, merging, and forming joint ventures and alliances to expand their geographic reach, enter new markets

and gain scale. Some of the largest cable TV companies, such as Tele-Communications inc. (TCI) and Time Warner Inc., are clustering cable systems. Cables have more capacity than current phone lines, suiting them for multimedia use. Bell Atlantic Corporation, Nynex Corporation, U.S. West, Inc. and Airtouch Communications Corp. formed an alliance of their cellular operations to gain a national presence and bid against AT&T and others for radio licenses to provide personal communications services. These licentes are being auctioned by the Federal Communications Commission to get as many as seven wireless competitors in each territory. Sprint Corporation (Sprint), which already competes in local phone service, long distance and cellular

markets, is forming a joint venture with cable companies TCI, Comcast Corp. and Cox Enterprises, Inc. to expand its presence in both local and wireless markets.

Soveral bills were introduced in Congress last year which would have accelerated competition for local access and phone services and permitted the Regional Bell Operating Compenies (RBOCs) to offer long distance services under certain conditions. Although none of these bills was enacted, several key members of Congress have introduced or announced plans to introduce new bills during 1995 that would permit competition in local services and set conditions under which the RBOCs would be permitted to offer long distance services and manufacture equipment.

Information Processing

TELECOMMUNICATIONS

ALL THOSE LONG-DISTANCE DISCOUNTS ARE SWEET, BUT . . .

Hikes in basic rates are offsetting special deals and sending phone company revenues ever higher



INTERSTATE RATES, ALTHOUGH SHARPLY LOWER SINCE THE ATAT BREAKUP IN 1984, HAVE BEEN RISING OVER THE PAST FOUR YEARS

f you own a telephone, you probably get a lot of pitches beseeching you to switch from one deeply discounted long-distance service to another. With the intense competition among MCI's Friends & Family, AT&T's True USA Savings, and Sprint's The Most, long-distance telephone customers must be getting some great deals, right?

Not necessarily. Data compiled by the Bureau of Labor Statistics show that basic interstate long-distance rates. though down precipitously since the breakup of the Bell System in 1984, have been rising for the past four years-by nearly 10% from January, 1990, to July, 1994. The hikes offset the discount plans and, along with rising calling volume, helped the long-distance industry post a healthy 8%-plus revenue gain in the second quarter. That compares with a yearover-year gain of slightly less than 5% in 1993's second quarter. As a recent study by market researcher Yankee Group Inc. notes, carriers "seem to be funding the marketing wars lately by slowly increasing basic ... rates."

The proof is in the Federal Communi-

cations Commission filings. In the past year, AT&T, which carries about 60% of the nation's long-distance traffic, has raised the per-minute charge for basic calls three times—by 4% in August. 1993, 6.3% on Jan. 1, and 4% on June 1. And the increases keep coming: On Aug. 29, AT&T filed a request with the FCC to raise domestic calling-card rates by an average 2.1% and international services by 1%. A month earlier, it had request-

ed rate hikes on 800 lines and international callingcard calls.

say—I'll just switch to MCI or Sprint. It won't save you much. MCI Communications Corp. and Sprint Corp. have raised their basic rates virtually in lockstep with AT&T. With some 85% of the long-distance market among them, the big three are unlikely to set off a genuine price war.

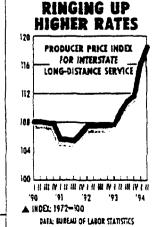
The three dispute the

BLS findings, arguing that extensive use of discounts that range from 10% to 35% makes the basic rate irrelevant—like a car's sticker price. "Nobody, absolutely nobody, pays sticker price," asserts MCI President Gerald H. Taylor.

That's not exactly accurate. While none of the long-distance carriers reveals how many subscribers are on discount plans. Yankee Group estimates that some 11 million are enrolled in MCI's

Friends & Family, 6.5 million in AT&T's True USA Savings program, and 3 million in Sprint's The Most. Since there are more than 140 million phone lines in the U.S., it stands to reason that millions of callers, at the least, are paying sticker price.

The carriers also brandish a set of statistics showing that, overall, rates continue to decline. The true measure of the market, they say, is the



66 BUSINESS WEEK/SEPTEMBER 19 1994

INFORMATION PROCESSING

average price per minute paid for longdistance service. That price, which factors in all discount plans, has declined every year for the past decade—by 4L1% in actual dollars and 63.3% when adjusted for inflation, according to AT&T.

But the average price per minute is more than just the money shelled out by consumers. It also includes the deeply discounted rates paid by corporations, which negotiate their own deals with the carriers. Still, even with steep corporate price cuts added in, the decline in the average rate is slowing. The measure fell 2.6% during the second quarter vs. a 4% drop a year earlier.

Even AT&T doesn't deny that tariff hikes are offsetting the cost of promotions. In its 1993 annual report, AT&T told of a \$750 million rate increase filed last December and a new bargain offering for high-volume callers. "We expect the effects on revenues of this discount plan and those 1994 price increases to offset each other," it said. Certainly the second-tier long-distance companies are aware of this balancing act. "The promotions may make it look like there is price competition in residential, but the fact is that the base rates have created profit margins that are much better than you get from businesses," says H. Brian

Thompson, chairman of long-distance

company LCI International Inc.

profits are better is that costs are lower. The access fees that interstate carriers pay to use local lines, which account for about 40% of their costs, have been falling steadily for years. At one time, those savings were automatically passed on to consumers. But since 1989, when the FCC allowed AT&T more flexibility in setting rates, one no longer necessarily follows the other. The change helped increase operating earnings for the second quarter by 12.4% for AT&T, 20.8% for MCI, and 33.3% for Sprint.

All of this is grist for both sides of the propaganda mill in Washington. As Congress debates an overhaul of telecommunications regulations, the local phone companies argue that they should be given entry to the long-distance market, contending there is no true competition there now. But the long-distance carriers say they are operating in one of the most competitive markets in the world. They do have one unshakable fact on their side: Interstate rates have dropped a lot further in the past 10 years than local tariffs.

So both sides continue to hit members of Congress over the heads with their rate charts. Meanwhile, what's a consumer to do? Well, when they call to enroll you in a discount plan, don't hang up.

By Catherine Arnst in New York

A WORLD FOR THE WISE.

If you feel like your money is going nowhere, invest in Janus Worldwide Fund.

With Janus Worldwide Fund, you might buy into a technology stock in Singapore. Or a medical firm in Germany. Or a multinational company based in Sydney. Or a world of other exciting investment opportunities that helped this no-load fund achieve an average annual total return of 18.54% for the life of the fund.*

If you're interested in an investment that has the potential to really take you somewhere, here's a chance to put your money to work on a global scale.

Call or send in the coupon today for a free prospectus containing more complete information, including expenses and special risks associated with foreign investing such as currency fluctuations and political uncertainty. Please read the prospectus carefully before you invest or send money.

BECAUSE IT'S NOT HOW MUCH YOU INVEST. IT'S HOW SMART.

JANUS WORLDWIDE H NO accerage Annual Total Section for the Period Endocre June 20, 1994

ONE YEAR

17.82%

LIFE OF THE FUND 18.54%
From inception - May 15, 1991



JANUS WORLDWIDE FUND

P.O. Box 173375, Denver, CO 80217-3375 1-800-525-8983 Ext. 630

*Figures are based on total return, including reinvestment of dividends and capital gains. Past performance does not guarantee future results. Your return and share price will vary and may be worth more or less at redemption than at purchase.

Funds distributed by Janux Distributors, Inc. Member NASD.

YEC.	I would like to know more about Janus Worldwide Fund!
153.	Janus Worldwide Fund!

Name
Address
City/State/Zip

Janus Funds are no-load mutual funds.

Send to: Janus Funds P.O. Box 173375 Denver, CO 80217-3375 1-800-525-8983 Ext. 630

BW 630